

REMARKS/ARGUMENTS

The indication of the allowability of claims 2, 7-10, 13-16, 19, 21, and 22 in the Office Action of June 14, 2006 is noted and appreciated.

By the present Amendment, claim 1 has been amended in a manner deemed to clearly distinguish the claimed invention over any teaching or suggestion of the references, thereby to render that claim allowable. Claim 2 has been amended to improve the syntax of the claim. Claim 7, and the corresponding text in the specification has been amended to the more conventional description of the mathematical process by which a derivative signal is obtained. Claims 11 and 13 have been amended into correspondence with amended claim 1 from which they depend. Claim 15 has been amended to improve its descriptiveness.

Apparatus claims 18-23 have been amended in a manner similar to that of method claims 1-17.

Claims 30-35 have been added to further define the claimed invention.

Claims 24-29, subject to the requirement for restriction summarized in paragraphs 1-5 of the Office Action have been canceled.

In the Office Action of June 14, 2006, independent method claim 1 and independent apparatus claim 18, and certain claims dependent thereon, were rejected under 35 U.S.C. §102 on U.S. Patent 5,447,166 to Gevins.

Amended independent claims 1 and 18 distinguish over the Gevins reference in the following aspects. These claims are now directed to a method/apparatus for monitoring a state of anesthesia or sedation resulting from the administration of a drug(s) selectively altering the state or functioning of one or both of the cortex of the brain and sub-cortical nervous system components.

These claims stand in distinct contrast to the method and system of the Gevins patent that, in contrast to measuring the depth of drug induced anesthesia or sedation is directed to measuring a user's state of alertness and mental workload level.

Further, amended claims 1 and 18 call for obtaining a first indicator comprising a measure of the complexity of the biopotential signal. Typical complexity

measures are described at page 12, line 26 through page 13, line 2 of the application specification. Complexity is typified by the entropy quantity specifically recited in claim 11. These differ from the parameters recited in the Gevins et al. reference at Col. 8, lines 53-62.

The subject matter of amended claims 1 and 18 is thus not anticipated, or rendered obvious, by any teaching or suggestion found in the Gevins reference and it is respectfully requested that this rejection be withdrawn.

Claims 6 and 12 were rejected under 35 U.S.C. §103 on the Gevins patent in view of U.S. Patent 4,570,640 to Barsa.

The Barsa reference shows a system for use with regional anesthesia using electrical stimulation carried out by selective element stimulator 113 as shown in Fig. 1 and in detail in Fig. 2.

The present invention, as defined in amended claim 1 from which claims 6 and 12 depend is not one for applying an electrical stimulation to provoke a response in a patient. With respect to claim 12, the portions of the Barsa specification (Col. 23, lines 60, 61) do not appear to refer to the power spectrum of the EMG signal data. Similarly, the Barsa reference does not describe the analysis of the complexity of the EEG signal data in ascertaining the state of a patient.

Claims 11, 17, and 23 were rejected on the Gevins patent in view of U.S. Patent 6,016,444 to John. As to the subject matter of claim 11, the John patent teaches the use of EEG power rather than the complexity of the EEG signal as a preferred measure. See Col. 10, line 61 of the reference. Claims 17 and 23 to which the John patent was also applied are believed allowable for the same reasons as the independent claims 1 and 18, from which they depend.

Claims 30-35, submitted with this Amendment are also believed allowed for reasons urged in connection with independent claims 1 and 18 from which they depend.

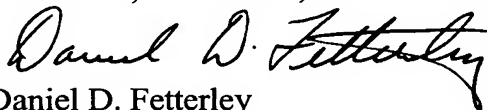
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Claims 1, 3-6, 11, 12, 17, 18, 20, and 23, as well as claims 30-35, are thus deemed to define subject matter patentable over the applied references and to be allowable along with claims 2, 7-10, 13-16, 19, 21, and 22.

Withdrawal of the rejection and passage of the application to allowance is respectfully requested.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

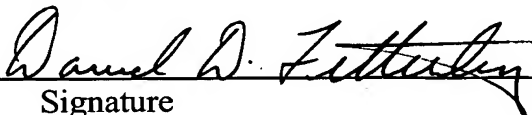


Daniel D. Fetterley
(Reg. No. 20,323)

100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
(414) 271-7590

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Daniel D. Fetterley	20,323
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	9/11/06
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